

Things to Know, Understand and Do For Chapter 10/11: Physical Characteristics of Gases

By the end of Chapter 10, you should

Know how to...
State the five points of the kinetic-molecular theory of matter
Define what an ideal gas is
Describe the following gas properties: expansion, density, fluidity, compressibility, diffusion, and effusion
Define pressure and convert between the different units of pressure (mm Hg, torr, atm, and kPa)
Describe how pressure is measured using a barometer
Perform calculations using Boyle's Law, Charles' Law, Gay-Lussac's Law, and the Combined Gas Law

understand...
How the kinetic molecular theory affects properties of matter
That pressure is a measure of collisions of gas molecules with the wall of their containers
How pressure, volume, moles, and temperature of gases are all proportionate to each other according to the kinetic molecular theory

Ch 10 and 11 Homework

Due the day before the test. Must be completed neatly. Use full sentences and/or show all work in calculations for full credit where applicable. This assignment may be passed in anytime before the test though. Students may also elect to pass in questions in smaller chunks during the course of our coverage of the chapter if that is more conducive to their learning style.

Read Chapters 10 and 11 (p 258-325) **Ignore all sections on weather.**

Do the following problems:

p 281 Q 1, 2, 7, 11, 12
p 286 Q 5, 6
p 298 Q 7, 8
p 302 Q 3
p 313 Q 3, 4d
p 316 Q 1, 2, 8